

Point of Wounding Care



COMBAT MEDIC ADVANCED SKILLS TRAINING (CMAST)

Point of Wounding Care

- 90% of all battlefield casualties die before they reach definitive medical care.
- Point of wounding care is the responsibility of the individual soldier, their battle buddy, the Combat Lifesaver, and the Soldier Medic.

Point of Wounding Care

- Causes of death on the battlefield:
 - Penetrating head trauma 31%
 - Uncorrectable torso trauma 25%
 - Potentially correctable torso trauma 10%
 - *Exsanguination from extremity wounds 9%
 - Mutilating blast trauma 7%
 - *Tension pneumothorax 5%
 - *Airway problems 1%

Penetrating Head Trauma



Penetrating Torso Trauma



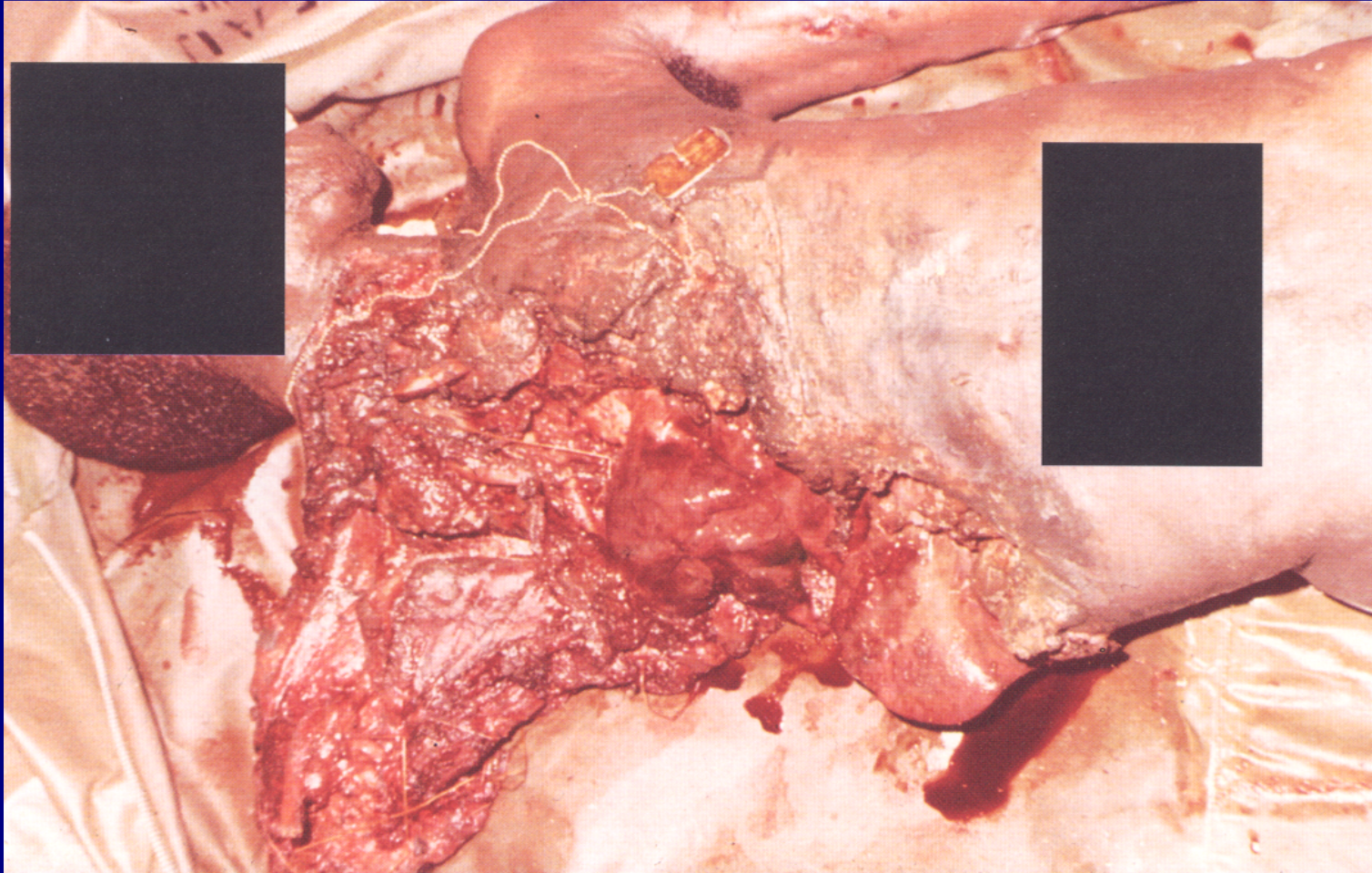
Extremity Hemorrhage



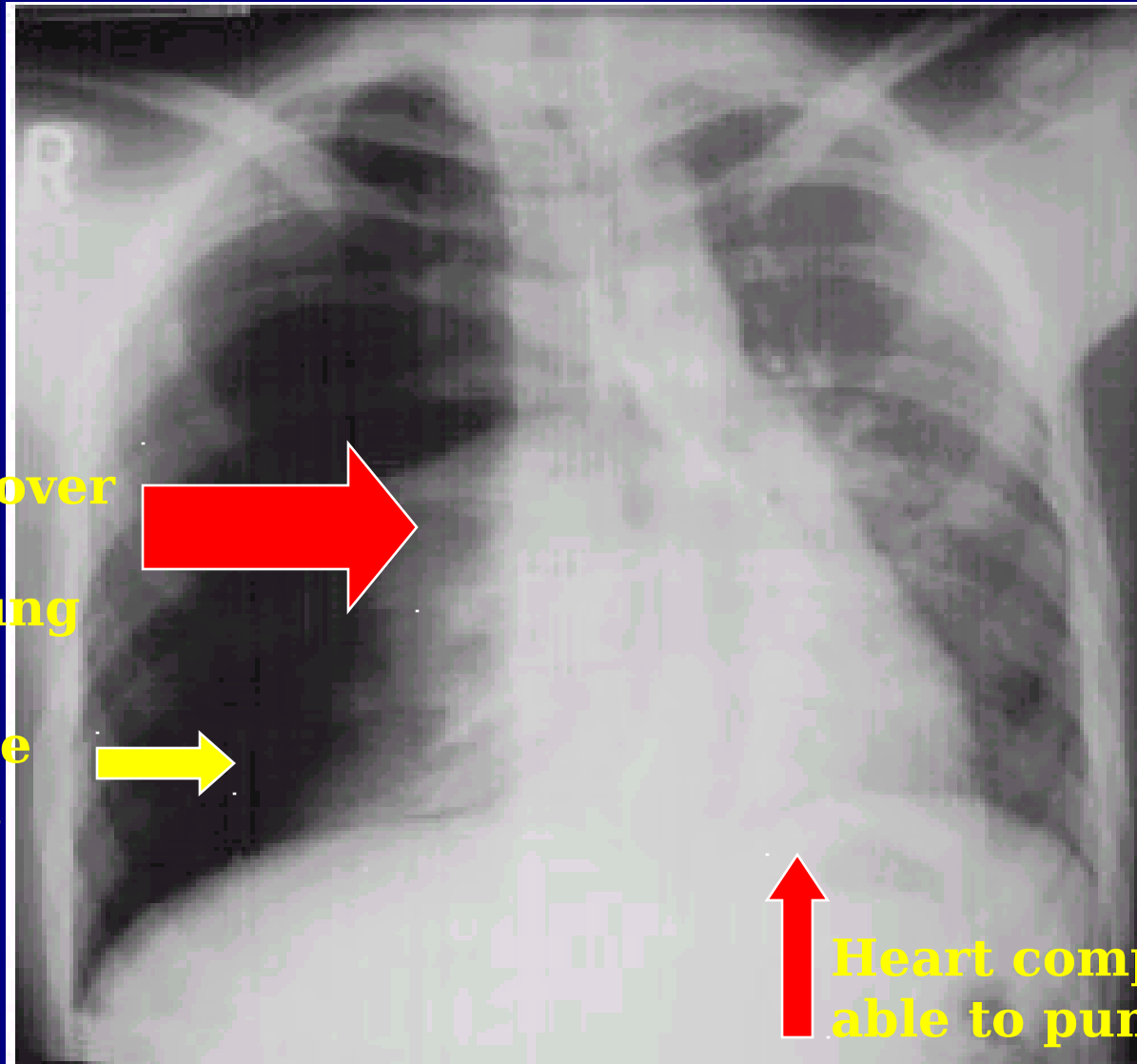
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Mutilating Blast Trauma



Tension Pneumothorax



**Air pushes over
heart and
collapses lung**

**Air outside
lung from
wound**

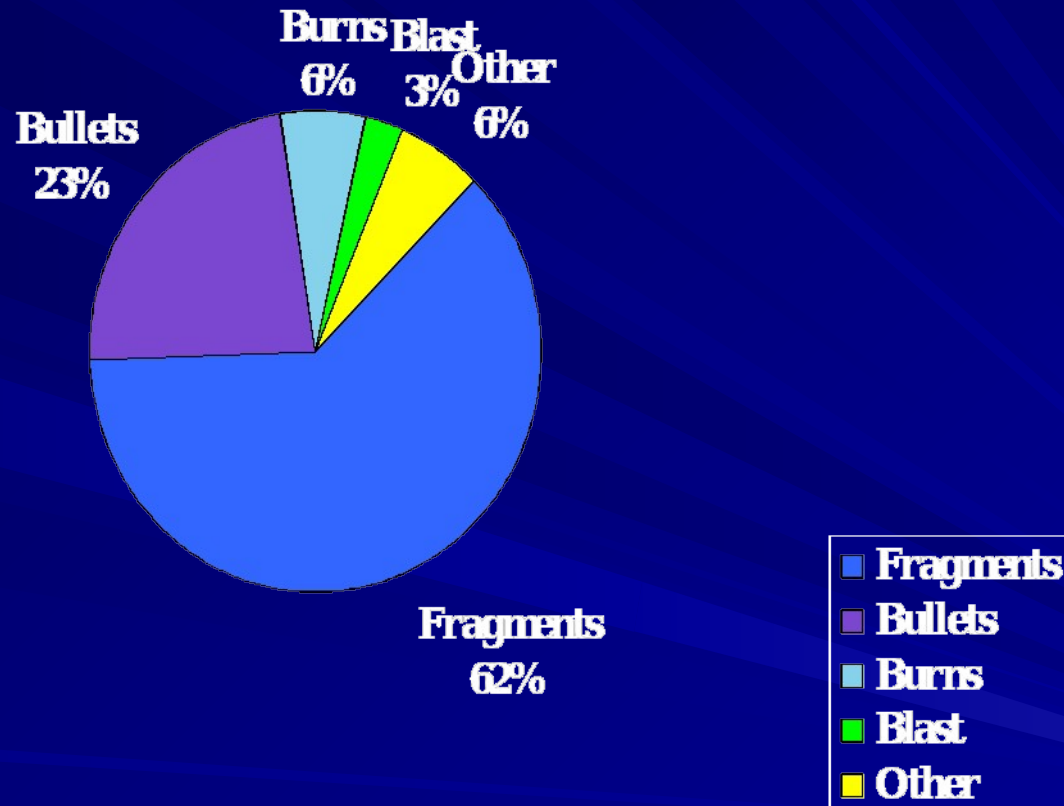
**Heart compressed not
able to pump well**

Airway Trauma



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Causes of Combat Wounds



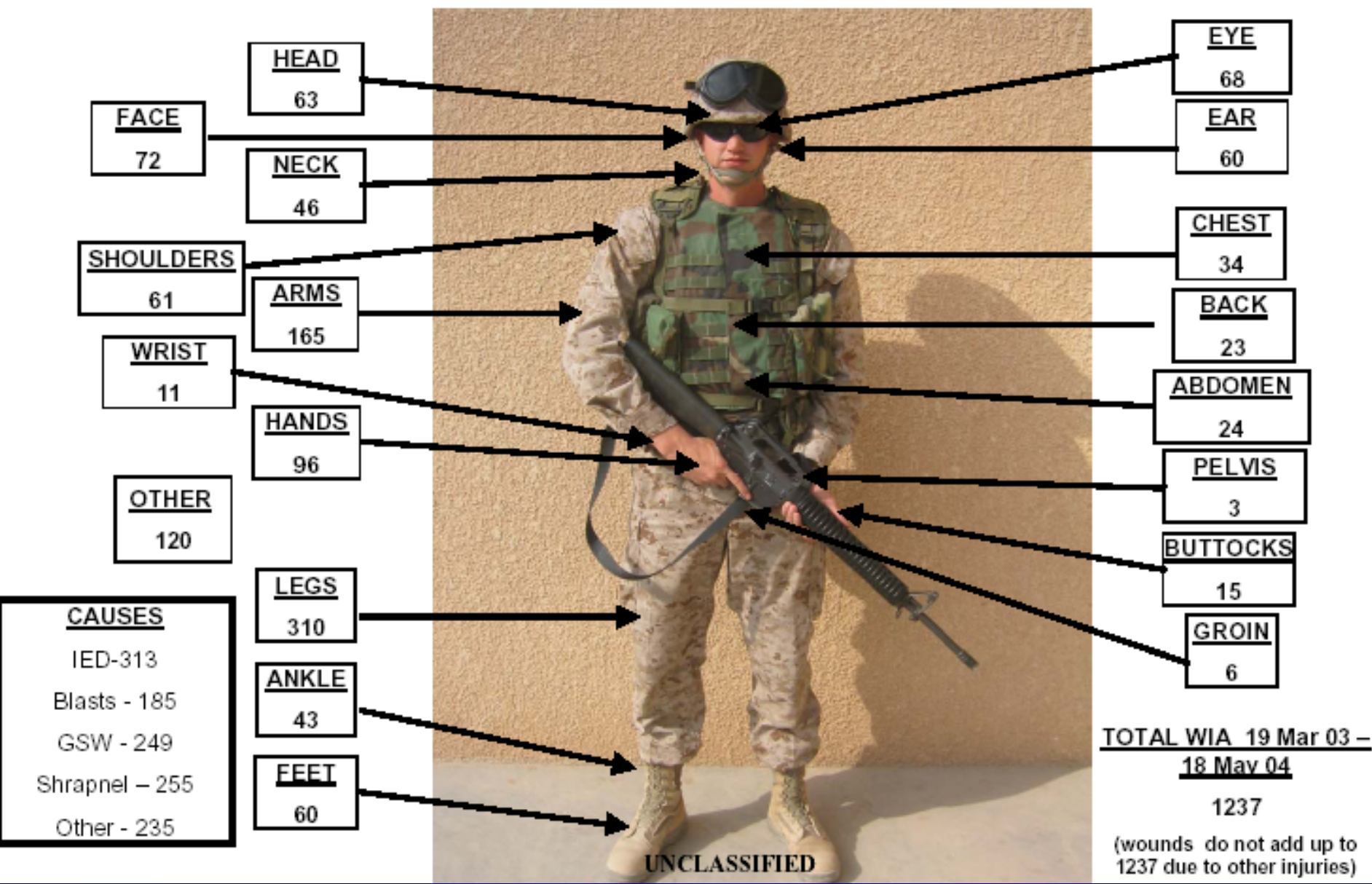
(WWI, WWII, Korea, Vietnam, Middle East)



UNCLASSIFIED

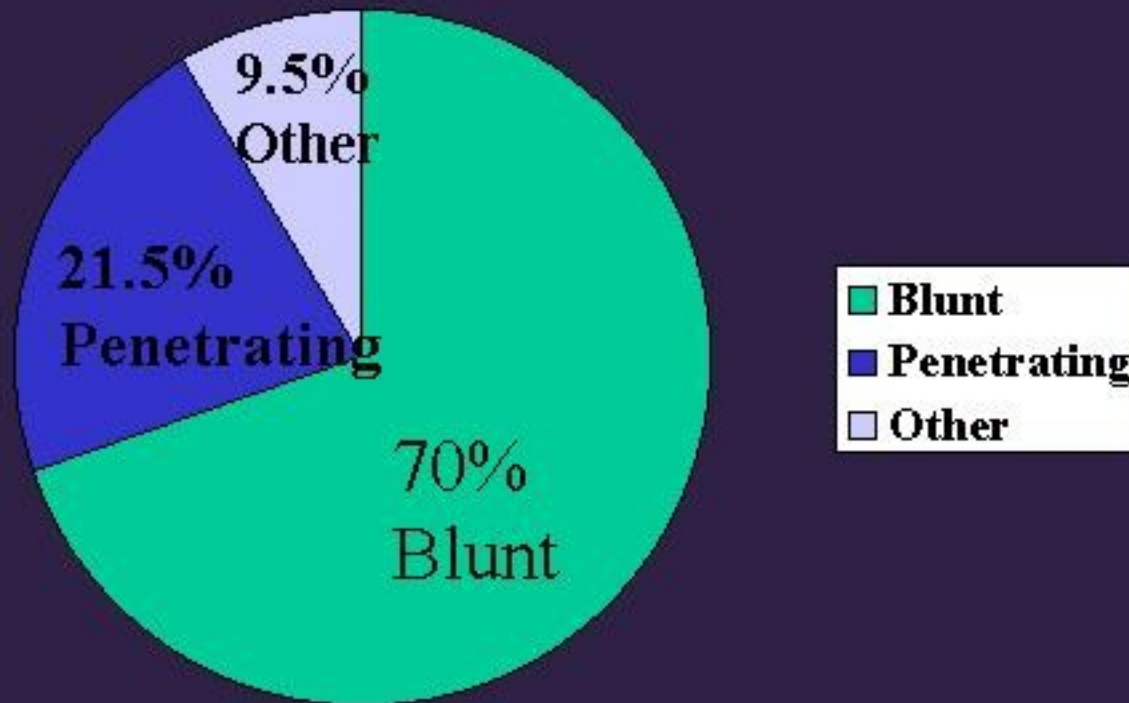
WIA WOUNDED AREAS

19 March 2003 – 18 May 2004



Epidemiology of Civilian Trauma

Trauma
Patients
Treated
In
Montreal
Canada



*Tamim H, Joshep L, Mulder D, et al: Field triage of trauma patients: Improving on the Prehospital Index
Am J of Emerg Med Vol 20(3) 2002*

Point of Wounding Care

- Primary causes of preventable death:
 - Hemorrhage from extremity wounds
 - Tension pneumothorax
 - Airway problems

Point of Wounding Care

- There needs to be a shift in our thinking, the days of not providing self-aid and laying there and yelling “*Medic*” are over. We must have the ability to assess our own wounds, provide self or buddy-aid if needed, and continue the mission if able. The bottom line is a soldier capability at the point of wounding, who is equipped and trained to decrease preventable battlefield death. This strategy will increase the unit’s combat effectiveness and it’s survivability. If we could make some minor changes in our common soldier medical skills training, we can improve the survival rate of 15% of all battlefield deaths.

Point of Wounding Care

- Levels of prehospital care on the battlefield:
 - *Self-Aid/Buddy-Aid (SABA)*
 - *Combat Lifesaver (CLS)*
 - *91W Soldier Medic*

Self-aid / Buddy-aid

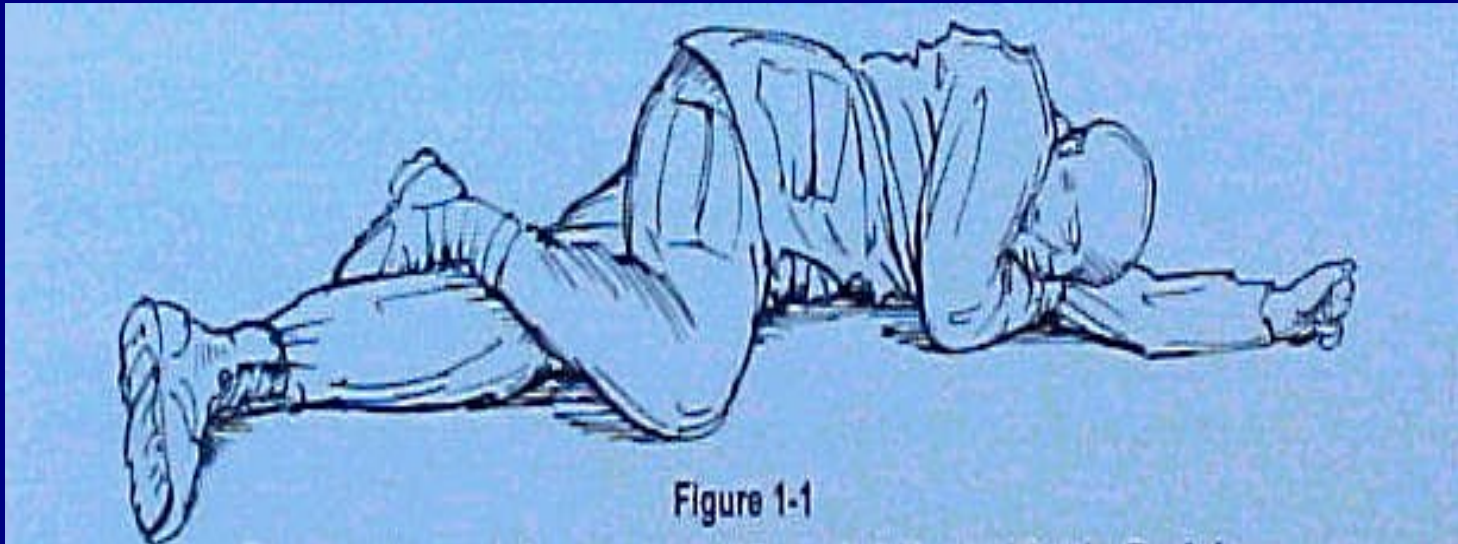
- Rapid Casualty Assessment.
- Control Hemorrhage.
- Treat penetrating chest trauma.
- Maintain airway.
- Package casualty for transport.

SABA Assessment Tasks

- Perform a rapid casualty initial assessment:
 - Airway
 - Breathing
 - Circulation

SABA Airway Tasks

- Provide Airway support in an unconscious casualty using an NPA.
- Place the casualty in the recovery position.

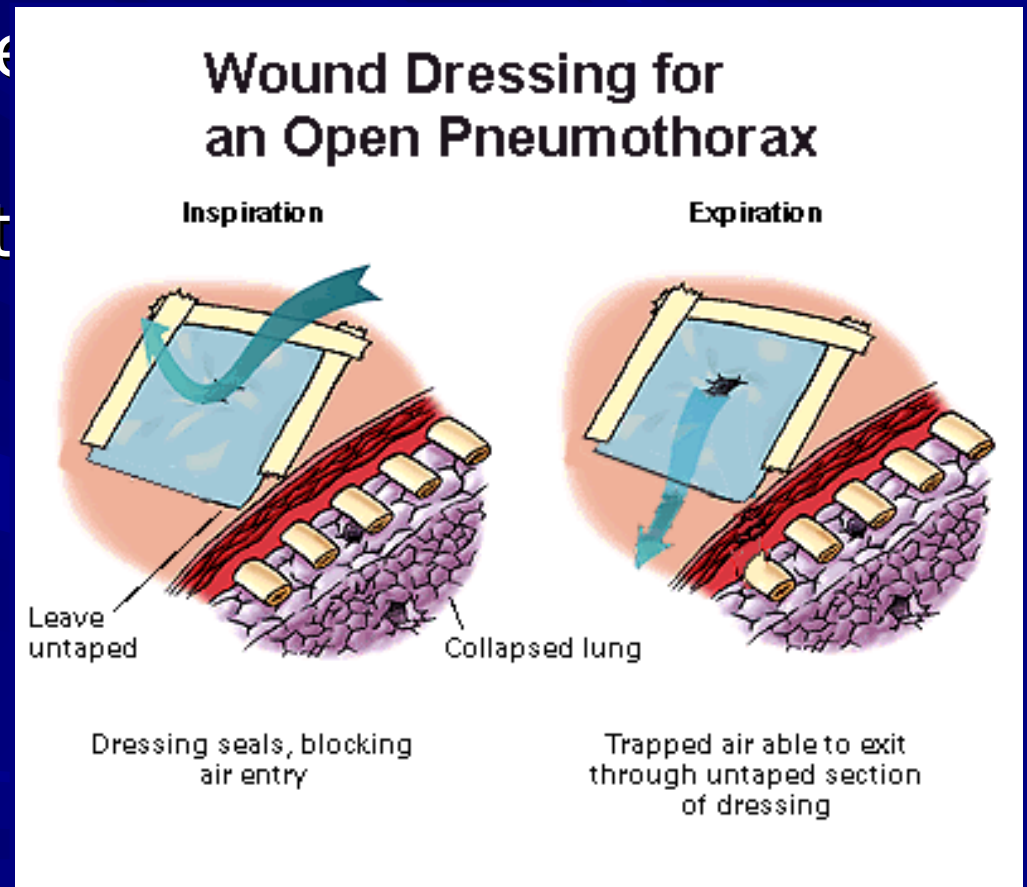


Nasopharyngeal Airway



SABA Breathing Tasks

- Place an occlusive dressing, on a penetrating chest wound.



SABA Bleeding Tasks

- Control hemorrhage using a tourniquet or an Emergency Trauma Dressing (ETD; Israeli bandage).



Combat Application Tourniquet Emergency Trauma Dressing

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Hemorrhage Control



Current First Aid Kit

- The Army has modified the medical tasks trained during Basic Combat Training that should address these issues; however, the soldier medic must be provided with an upgraded "Kit" that will provide the required supplies to render that care.



Improved First Aid Kit

Emergency Trauma
Dressing
(Israeli Bandage)

4"
Kerlix

Nasopharyngeal
Airway (NPA)

2" Tape

Exam Gloves
(4)

Weight: 1.08 lbs

Cube: 128 ci



Combat Application
Tourniquet (CAT)



MOLLE Type
Pouch

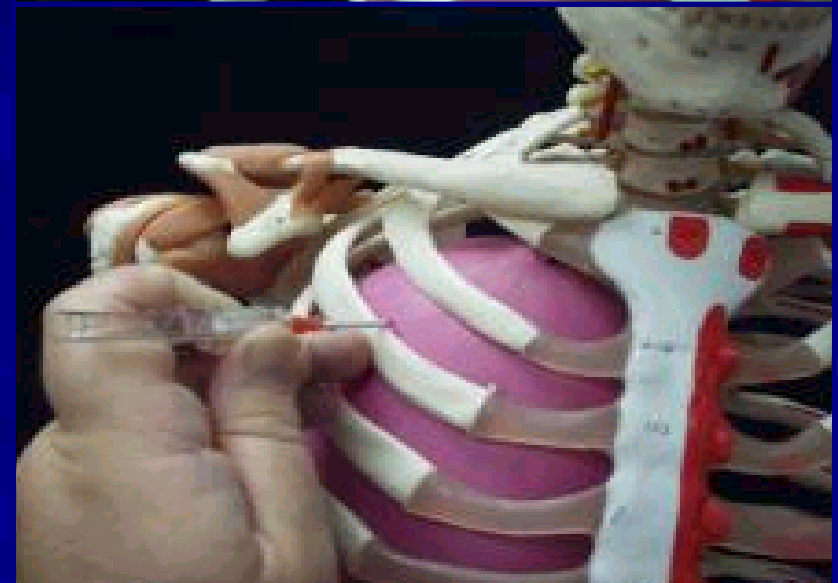
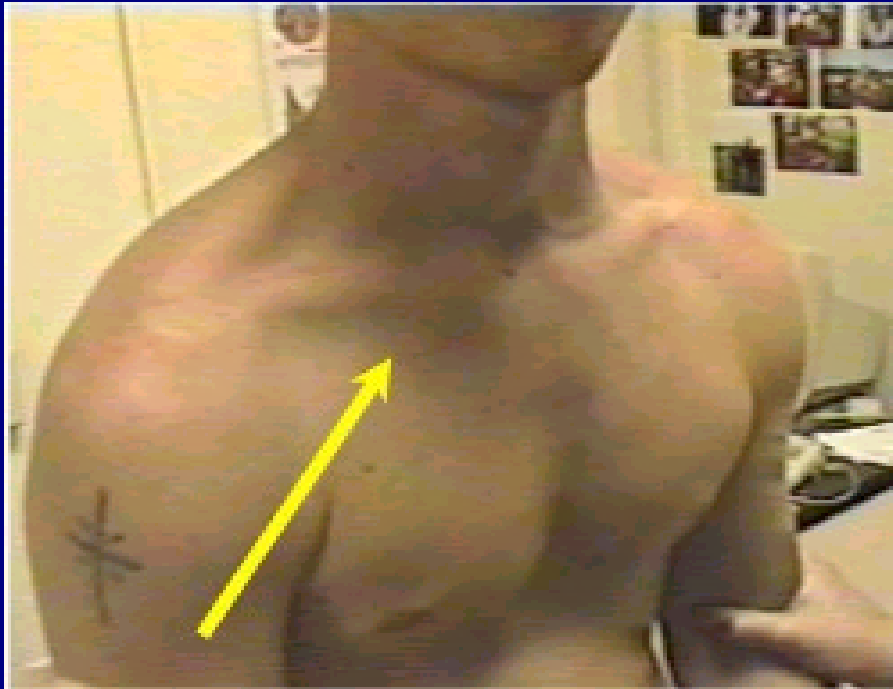
Combat Lifesaver Training

- Combat Lifesavers (CLS) are primarily shooters, they are not junior medics. They should be trained to provide Lifesaving Care as the tactical situation permits. We know what the most common causes of preventable death are. They should be trained to treat these conditions.

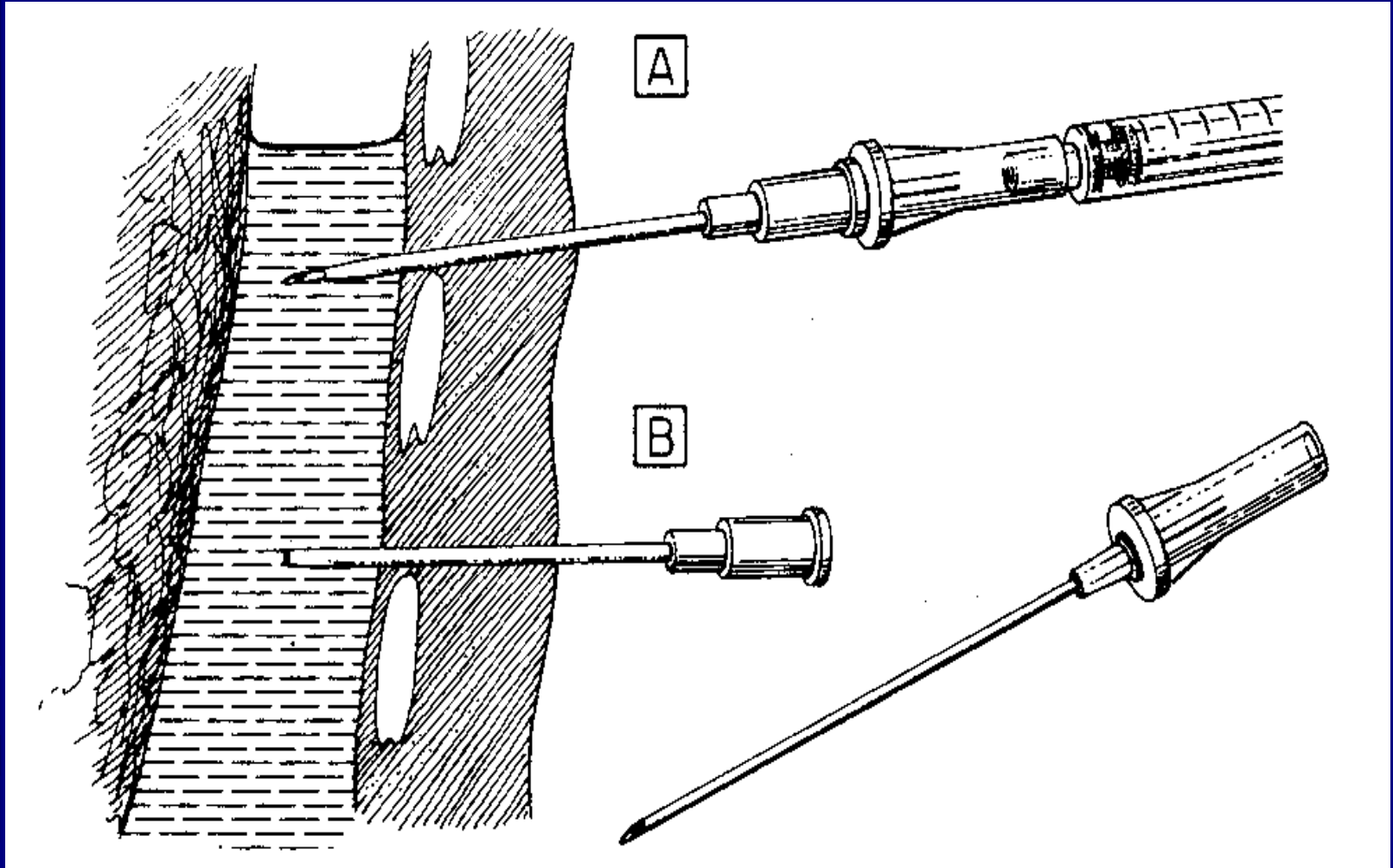
Combat Lifesaver Tasks

- Rapid casualty assessment.
- Control hemorrhage.
- Treat penetrating chest trauma.
- Maintain airway.
- Initiate saline Lock.
- Package casualty for transport.
- Initiate FMC.
- Initiate nine-line MEDEVAC request.

Needle Chest Decompression



Needle Chest Decompression



Intravenous Fluids

- Initiate an IV infusion with a saline lock



SKED Litter



Talon II Litter



91W Health Care Specialist

- The soldier medic is the primary care provider in the pre-hospital setting with additional medical skills and equipment to augment the lower levels of care and resupply the CLS. They are trained in Tactical Combat Casualty Care principles.

TC-3, 91W

- Care Under Fire.
- Tactical Field Care.
- Combat Casualty Evacuation Care.

TC-3

- Casualty scenarios in combat usually entail both a medical problem as well as a tactical problem.
- We want the best possible outcome for both the man and the mission.
- Good medicine can sometimes be bad tactics, bad tactics can get everyone killed, and/or cause the mission to fail.

TC-3

- This approach recognizes a particularly important principle:
- Performing the correct intervention at the correct time in the continuum of combat care. A medically correct intervention performed at the wrong time in combat may lead to further casualties.



HMMWV at 0630



Shrapnel from the RPG flew back through the driver's side and out the frame. The exit hole was elevated above the entry, indicating the RPG was fired from the road level, by an individual most likely at the crouch.



Warrior Aid and Litter Kit

- Attacks against lightly armored vehicles continue to be a source of injury and death to our Soldiers. Direct and indirect fire weapons, improvised explosive devices and mines produce devastating effects.

Warrior Aid and Litter Kit

- Several initiatives ranging from improved armor kits, and sandbagging vehicle floors, to improving Soldier body armor, to changing Tactics Techniques and Procedures have addressed improving Soldier survivability. However, nothing substantial has been implemented to address providing adequate casualty care at the point of wounding in these scenarios.

Warrior Aid and Litter Kit

- These convoys/patrols may or may not have a Soldier Medic or even a Combat Lifesaver organic to the element. They must rely on equipment carried on the vehicles and on the individual to provide care and conduct evacuation.

Current Vehicle First aid Kit



Warrior Aid and Litter Kit

- A need exists for a vehicle life-saving kit that can be carried on every vehicle traveling in a convoy or on a combat patrol within the current tactical theaters.
- Positioning this kit on less than every vehicle risks losing the ability if the vehicle it is loaded on is destroyed.

Warrior Aid and Litter Kit

- This kit should provide a single unit of issue that will contain a supply of life saving medical equipment as well as a compact litter to facilitate casualty evacuation without causing further injury, utilizing any vehicle of opportunity.

WARRIOR AID AND LITTER KIT

<u>Item</u>	<u>NSN</u>
1-Talon II Litter 90C	6530-01-504-9051
1-Litter Carrier	6530-01-504-9056
6- Cravats	6510-00-201-1755
4- Kerlix	6510-00-058-3047
4- Emergency Trauma Dressing	6510-01-492-2275
2- Combat Application Tourniquets	6515-01-521-7976
2- Petrolatum gauze	6510-00-202-0800
1-Blanket Heating 4 panel	6532-01-525-4062
1-Blanket Blizzard Wrap	6532-01-524-6932
1- Nasopharyngeal Airway	6515-00-300-2900
2- 6in Ace Wraps	6510-00-935-5823

CMAS

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Warrior Aid and Litter Kit



Warrior Aid and Litter Kit

“WALK”
stored on
back skid of
GMV using
internal
shoulder
straps and
quick release
ratchet.



Summary

- The only place in the continuum of battlefield care where we can directly influence survivability is at the point of wounding. By training every soldier to provide point of wounding care we can save more lives on today's battlefield.

Questions?



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